

What is claimed is:

# CLAIMS

1. A method for embedding a message in compressed content comprising  
5 at least one key frame and at least one non-key frame, the method comprising:  
embedding a message in the at least one key frame.
2. The method according to claim 1 and wherein the embedding  
comprises embedding the message substantially only in the at least one key frame.
- 10 3. The method according to either claim 1 or claim 2 and wherein the at  
least one key frame comprises a plurality of key frames.
4. The method according to claim 3 and wherein the embedding  
15 comprises embedding the message in each of the plurality of key frames.
5. The method according to claim 3 and wherein the embedding  
comprises embedding the message in only some of the plurality of key frames.
- 20 6. The method according to any of claims 1 - 5 and also comprising:  
providing non-compressed content; and  
producing the compressed content from the non-compressed content,  
wherein the producing comprises the embedding.
- 25 7. The method according to any of claims 1 - 5 and also comprising:  
providing the compressed content,  
wherein the embedding comprises:  
identifying the at least one key frame; and  
embedding the message in the at least one identified key frame.
- 30 8. The method according to claim 1, and also comprising distributing a  
stream of compressed content onto a storage medium of an end-user unit, the content

comprising a plurality of key frames wherein each individual key frame comprises the embedded message.

9. The method according to claim 8 and wherein the storage medium  
5 comprises a removable storage medium.

10. The method according to either claim 8 or claim 9 and wherein the storage medium is external to the end-user unit.

10 11. The method according to any of claims 8 - 11 and wherein the storage medium comprises a pre-recorded medium.

12. The method according to claim 6 and wherein the compressed content is compressed with MPEG-2 compression.  
15

13. The method according to claim 12 and wherein the key frame comprises an I-frame.

14. A message delivery method comprising:  
20 receiving, at a consumer device, compressed content, the compressed content comprising a plurality of video frames, the video frames comprising a plurality of key frames and a plurality of non-key frames, at least some of the plurality of key frames comprising an embedded message;  
selecting at least one of the plurality of key frames from the  
25 compressed content, thereby producing at least one selected key frame, the embedded message being comprised in the at least one selected key frame;  
producing non-compressed content from the selected at least one of the plurality of key frames; and  
outputting the non-compressed content comprising the embedded  
30 message.

15.           The message delivery method according to claim 14 and wherein the plurality of video frames is received from a broadcast video stream.
16.           The message delivery method according to claim 14 and wherein the  
5 plurality of video frames is received from a digital recording.
17.           The message delivery method according to claim 16 and wherein the digital recording is pre-recorded on a medium.
- 10
18.           The message delivery method according to any of claims 14 - 17 and wherein the compressed content is compressed with MPEG-2 compression.
19.           The message delivery method according to any of claims 14 - 18 and  
15 wherein the plurality of key frames comprising an embedded message comprises a plurality of I-frames.
20.           A pre-recorded medium comprising:  
                digital compressed content, the content comprising a plurality of video  
20 frames, the video frames comprising at least one key frame and one non-key frame, the at least one key frame comprising an embedded message.
21.           The pre-recorded medium according to claim 20 and wherein the embedded message is embedded substantially only in the at least one key frame.
- 25
22.           The pre-recorded medium according to claim 20 and wherein the at least one key frame comprising an embedded message comprises a plurality of key frames.
- 30 23.           The pre-recorded medium according to either claim 20 or 22, and wherein the compressed content is compressed with MPEG-2 compression.

24. The pre-recorded medium according to any of claims 20 - 23 and wherein the at least one key frame comprising an embedded message is an I-frame.
25. The pre-recorded medium according to any of claims 20 - 24, and  
5 wherein the medium comprises a DVD.
26. A message embedder operative to embed a message in compressed content comprising at least one key frame and at least one non-key frame, the embedder embedding the message in the at least one key frame.
- 10 27. A method for handling compressed content, the method comprising:  
embedding a message in compressed content comprising at least one key frame and at least one non-key frame, the embedding comprising embedding the message in the at least one key frame;  
15 receiving the compressed content at a consumer device, the compressed content comprising the at least one key frame comprising the embedded message;  
selecting at least one key frame from the compressed content, thereby producing at least one selected key frame, the embedded message being comprised in the at least one selected key frame;  
20 producing non-compressed content from the at least one selected key frame; and  
outputting the non-compressed content comprising the embedded message.
- 25 28. Apparatus for handling compressed content comprising:  
an embedder operative to embed a message in compressed content comprising at least one key frame and at least one non-key frame, wherein the embedder embeds the message in the at least one key frame;  
a receiver operative to receive the compressed content at a consumer  
30 device, the compressed content comprising the at least one key frame comprising the embedded message;

a selector operative to select at least one key frame from the compressed content, thereby producing at least one selected key frame, the embedded message being comprised in the at least one selected key frame;

5 a producer operative to produce non-compressed content from the at least one selected key frame; and

an outputter operative to output the non-compressed content comprising the embedded message.

29. Apparatus for message delivery comprising:

10 a consumer device operative to receive compressed content, the compressed content comprising a plurality of video frames, the video frames comprising a plurality of key frames and a plurality of non-key frames, at least some of the plurality of key frames comprising an embedded message;

15 a selector comprised in the consumer device operative to select at least one of the plurality of key frames from the compressed content, thereby producing at least one selected key frame, the embedded message being comprised in the at least one selected key frame;

a producer comprised in the consumer device operative to produce non-compressed content from the selected at least one of the plurality of key frames; and

20 an outputter comprised in the consumer device operative to output the non-compressed content comprising the embedded message.